# CHAPTER 207 EXPLOSIVE MATERIALS

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- **207-01.** Adoption of State Code. Except as otherwise provided in this chapter, the city of Milwaukee adopts ch. Comm 7, Wis. Adm. Code, as amended, as part of this code.
- **207-3.** Explosives. 1. DEFINITIONS. Words and phrases not herein defined shall be as defined in ss. 200-07 and 200-08. For the purpose of this section, the following words shall have the meanings assigned to them in this subsection.
- a. Superintendent. The person having general supervision of the work regulated in this section.
- b. Foreman. The person who at any time is charged with the immediate direction of the work regulated in this section.
- Explosive. Shall mean and include any chemical compound or mechanical mixture, commonly used or intended for the purpose of producing an explosion that contains any oxidizing and combustible units or other ingredients in such proportions, quantities, or packing that an ignition by fire, by friction, by concussion, by percussion, or by detonation of any parts of the compound or mixture may cause a sudden generation of highly heated gases, so that the resultant gaseous pressures are capable of producing destructive effects on contiguous objects or of destroving life o r limb.
- d. Magazine. Any building, structure, or receptacle used for the storage of explosives.
- e. Primer. A capped fuse, electric exploder, or other source of ignition inserted in a cartridge of explosive.
- f. Blaster. Any person or persons designated by the superintendent or employer to supervise blasting operations or to handle explosives, and who shall possess a certificate of competency for blasters issued by the department of commerce.

- g. Railroad. Shall mean and include any steam, electric, or other railroad which carries passengers or material for hire.
- **2.** PERMITS. a. See s. 200-33-14 for fees.
- b. In all cases involving the use of any explosive, the commissioner may refuse such permit and may limit by permit the use of such explosive to 25 pounds, if in his discretion the use of such explosive or an amount of such explosive greater than 25 pounds is likely to endanger or cause damage to life, health or property.
- c. Permits for the storage or use of explosives, when issued, shall at all times be kept on the premises in a readily accessible place for inspection.
- d-1. No permit shall be issued by the department unless the applicant furnishes a certificate of insurance issued by an insurance company which is either:
- d-1-a. Incorporated pursuant to the laws of the state of Wisconsin.
- d-1-b. Licensed to do business in the state of Wisconsin and registered with the office of the commissioner of insurance for the state of Wisconsin.
- d-1-c. A surplus lines insurance company where the certificate of insurance is placed by a surplus lines insurance agent licensed to do business in the state of Wisconsin.
- d-2. The certificate of insurance shall provide the following:
  - d-2-a. Bodily Injury/ Limits of Liability
    Property Damage

each occurrence \$1,000,000 general aggregate 1,000,000 products/completed 1,000,000 operations aggregate

- d-2-b. Verification that there are no exclusions for loss resulting from use of fireworks, explosive material or pyrotechnic displays by the named insured.
- d-2-c. Reference to the inclusion of the city of Milwaukee as an additional insured.

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- d-3. At the request of the commissioner, the city attorney shall review any certificate of insurance submitted to the department for purposes of determining whether the certificate complies with the requirements prescribed in this paragraph.
- 3. REVOCATION OF PERMIT. If, after a permit has been granted, an inspection by the commissioner discloses that the permit holder or those acting under him, or those attempting to use or store such explosives are operating contrary to the regulations of this section, the commissioner shall immediately stop all operations and revoke the permit. When such operations are stopped and the permit is revoked, such explosives shall immediately be removed from such premises and the city, subject, however, to the regulations of this section relative to transportation of explosives.
- 4. DELIVERY IN TRANSIT. No person conveying explosives of any kind or nature by means of a boat, vessel, railroad car, wagon, automobile, or other conveyance shall enter the city under any circumstances without first reporting to the commissioner. The commissioner may permit such conveyance to enter and remain in the city for a specified period of time, and if such time exceeds 5 hours, a permit shall be secured from the commissioner.
- 5. VEHICLE. a. Any vehicle when used for transporting explosives shall be marked or placarded on both sides and the rear with the words EXPLOSIVES--DANGEROUS in letters not less than 3 inches high. When transporting explosives within the city, such vehicles shall make no stops, except for delivery and stops required by law, and the speed of the vehicle shall not exceed 25 miles per hour.
- b. Except in cases of emergency as determined by the commissioner, all explosives shall be transported through the streets of the city between the hours of 12:00 p.m. and 6:00 a.m., and not more than 500 pounds shall be transported at one time. The commissioner may designate the route to be traveled.

- c. Exposed metal parts in the interior of the vehicle shall be insulated from the explosives with wood, blankets or other fibrous material.
- d. No tools, blasting caps, exploders, detonators or other flame-producing materials shall be carried in a vehicle containing explosives, excepting tools for the operation and repair of such vehicle.
- e. Explosives shall not be transported in any bus or in any form of trailer, nor shall any trailer be attached to a vehicle hauling explosives.
- explosives by any means whatsoever shall not smoke in or upon such vehicle, nor drive, load, or unload the vehicle while intoxicated, or in a careless or reckless manner; nor shall such persons deliver any explosives to any other place except to an approved magazine and to the person in charge thereof.
- **7.** REPORTS. Any person storing explosives for blasting, sale or for any other purpose or use shall make a monthly report to the commissioner on forms furnished for such purpose, stating the amount and kind of explosives in storage and the location of the magazine, or the exact location of such storage in any building or structure.
- 8. MAGAZINES.a. Every magazine shall be of approved concrete or masonry construction, or of wood construction consisting of double walls not less than 6 inches apart, filled from sill to plate with dry sand, and the magazine completely surfaced on the outside with not less than No. 26 U.S. gage galvanized iron. Such magazine shall have only approved ventilating screened openings and entry door. The door lock and method of locking the door of the magazine shall be approved by the commissioner, but in all cases the lock shall be a mortise or rim dead lock to open easily from the inside. The magazine shall be constructed as further regulated in general orders issued by the department of commerce.

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- b. Upon each end of such magazine and above the side walls thereof, or upon each exterior surface of its barricades, or on the premises within a distance of 25 feet of the magazine, there shall be posted permanent signs with the words EXPLOSIVES KEEP OFF legibly printed thereon in letters no less than 3 inches high.
- c. No naked light (open flame) shall be used in a magazine containing explosives.
- d. Aportable magazine, approved by the commissioner, may be used if constructed of lumber not less than 2 inches in thickness (nominal) and covered on the outside with not less than No. 26 U.S. gage sheet metal, and equipped with a hinged lid and a lock. The words EXPLOSIVES-DANGEROUS in 3 inch letters shall be plainly painted on the outside of the magazine. Not more than 50 pounds of explosives or not more than one day's supply, shall be stored in such magazine at any one time.
- e. The door or lid of any magazine containing explosives shall be closed and locked at all times, except when it has to be opened to remove or replace explosives by the person in charge thereof, and such magazines shall at all times be kept clean and dry.
- **9.** LOCATION OF MAGAZINES. a. The location of all magazines in which explosives are held, kept or stored shall be approved by the commissioner.
- b. The area surrounding the magazine for a distance of at least 25 feet shall be kept free from rubbish, dead grass, shrubbery and other combustibles or obstructions.
- **10.** STORAGE RESTRICTIONS. Except as otherwise regulated by this section, various types of explosives shall be stored separately in approved magazines as follows:
- a. No person shall place, keep or store in a magazine explosives in excess of 500 pounds.
- b. No person shall place, keep, or store liquid nitroglycerine within the city.
- c. No person shall place, keep, or store black powder, blasting powder, or smokeless powder in a magazine containing any other explosive.
- d. No person shall place, keep, or store blasting caps, detonators, electric fuses, cordeau fuses or any other type of primer in a magazine containing other explosives.

- e. No person shall prepare a primer in a magazine containing any explosives, or within a radius of 50 feet of such magazine, nor prepare more primers than necessary for immediate use.
- f. No person shall store, place, or keep any clothing, cotton waste, rags or other article or thing in a magazine containing explosives, except a wooden mallet and a wooden wedge for the purpose of opening boxes of explosives, which shall be opened only with such implements.
- g. No person shall smoke while handling, storing or transporting explosives, nor shall such person permit an open fire to be brought to or near the place where explosives are stored, used, or transported.
- 11. MANUFACTURE PROHIBITED. No person shall manufacture electric fuses, safety fuses, blasting caps, or explosives within the city.
- STORAGE AND SALE OF GUNPOWDER. a-1. Persons having a permit may store for sale on their premises a total quantity not exceeding in all 25 pounds of gunpowder and black powder. Such powder shall be kept in closed metal cannisters, placed in a separate magazine constructed of lumber not less than 2 inches in thickness (nominal) and covered on the outside with not less than No. 26 U.S. gage sheet metal and equipped with a hinged lid and lock, and mounted on wheels or skids at least 2 inches from the floor. The magazine shall be plainly marked EXPLOSIVES in 3 inch letters and located within a building on the floor nearest the ground level, and within 10 feet from an outside entrance.
- a-2. Except for single-family residences, the storage of gunpowder is prohibited in all other buildings occupied for residential purposes.
- b. Persons having a permit may store for sale on their premises a total quantity not exceeding in all 300 pounds of modern smokeless powder, generally classified as propellant powder or sometimes as flammable solids, and including double base powder, for ammunition loading, in original containers in a locked cabinet painted red and labeled SMOKELESS POWDER STORAGE in letters at least 4 inches high, and located within a building on the floor nearest the ground level, and within 10 feet from an outside entrance.

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- c. The commissioner may at his discretion permit a storage arrangement which is not strictly in compliance with this section. Such modifications shall vary only a reasonable minimum from the regulations herein established, but shall comply with the spirit and intent. Requests for such modifications or variations and the action taken thereon shall be in writing.
- **13.** EXPLOSIVES AT SITE. a. Explosives shall be conveyed to the site from the magazine in approved tightly closed boxes or sacks.
- b. Detonatorsshall be conveyed from the magazine to the site in a separate approved container from that used for the explosives. Such container shall be provided with a cover and be lined with soft material.
- c. Explosives and detonators shall not be taken down a shaft on the same cage at the same time.
- d. While explosives are being taken through locks, no men other than the lock tender and the carrier shall be permitted in the lock
- e. Detonators and explosives must be carried or stored separately at all times.
- f. After blasting is completed, all remaining explosives and detonators shall be returned at once to the magazines in the same manner as required for conveying them to the site.
- g. Explosives shall not be placed on any site within 10 feet of any electrical wiring system or equipment.
- No explosives shall be used within h. 500 feet on each and every side of any church, school, hospital, theater or place of public assemblage without the written approval of the commissioner, bases on his judgment that the physical conditions are such that these facilities will not be unduly disturbed. As a condition of such approval, the commissioner may prescribe limits of charges to be used and hours during which they may be detonated. Explosives shall not be used at distances less than 200 feet away from any church, school, hospital, theater, place of public assembly or any building or structure, and the amount of explosive to be used shall be limited as follows:

- h-1. When the distance is 200 feet, not more than 25 pounds.
- h-2. When the distance is 250 feet, not more than 50 pounds.
- h-3. When the distance is 300 feet, not more than 100 pounds.
- h-4. In no case shall more than 100 pounds be used.

This section shall not apply to any sewer construction or any shaft in connection therewith when such sewer is being installed by tunnel construction methods, but the commissioner may apply subs. 2, 16, and 17 to such construction.

- RECORD 14. ON USE EXPLOSIVES. a. Every person using explosives or responsible for the use thereof shall keep a daily blasting record on the job site for view by the commissioner or other interested parties. Such daily blasting record shall show the date of blasting, time, location, number of holes, depth of holes, amount of explosives used by sticks, if dynamite, and pounds or by other applicable measurement if other explosives are used, and number if misfires, if any. Such daily blasting record shall also show the date, kind and quality of explosives purchased, as well as the name of the seller of such explosives. After each entry the blaster shall sign in the presence of 2 subscribing witnesses, certifying all entries are correct.
- b. A total of all columns must be submitted to the commissioner of building inspection on jobs completed in 30 days or less, and once a month on jobs of greater duration.
- 15. BLASTING AND FIRING. a. No person shall explode a blasting charge unless he has a certificate of competency from the department of commerce.
- b. All electric apparatus of whatever nature used in blasting operations shall be kept locked and under direct personal charge of the blaster.
- c. No person shall conduct blasting operations between 9 p.m. and 7 a.m., nor at any time on Sunday, except under authority of a special permit from the commissioner.

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- d. Except in cases of instantaneous blasting by electricity, immediately after firing a blast the blaster shall check the number of shots loaded against those exploded. If there are any misfires, or any doubt as to the total number of shots exploding, no person shall be permitted to approach the charges until at least 1/2 hour shall have elapsed, lest the trouble be a hangfire and not a misfire.
- e. No person shall load holes in blasting operations except a person holding a certificate of competency; provided, however, that while holes are being actually loaded, laborers may act as blasters' helpers under the direct supervision and responsibility of the blaster.
- f. The blaster shall cause sufficient warning to be given and shall be responsible that all persons retreat to a safe distance or shelter before he sets off the blast.
- g. Only wooden rods may be used for tamping or loading.
- h. No blaster shall attempt to use dynamite that is frozen. Only approved methods of thawing shall be permitted.
- i. Before drilling is commenced on any site, all remaining holes shall be examined with a wooden stick for unexploded charges, and if any are found, such unexploded charges shall be fired before work proceeds.
- j. When the firing is done electrically, individual electric detonators shall be tested with a galvanometer, both before and after loading.
- k. When the firing is done by electricity from power or lighting wires, an approved switch shall be used and so arranged that the lever is down when the switch is in the off position.
- L. The switch shall be fixed in a locked box to which no person shall have access except the blaster. This box shall be constructed so that it can be closed and locked only when the switch is in the off position. There shall be provided flexible leads or connecting wires not less than 5 feet in length, with one end plugged in a receptacle on the incoming lines and the other end provided with a plug that can be connected to the switch on the shot-firing circuit inside the switch box. At all times when the switch is in the off position, the lead wires shall be connected to an

effective ground. After the blasting, the switch lever shall be pulled out, the wires disconnected, and the box locked before any person shall be allowed to return to the blasting area, and shall remain so locked until ready to blast. When work is being done in a tunnel, the blasting wires shall be laid remote from the lighting and power wires. The commissioner may waive this regulation relating to the switch and the switch box if the number of blasts does not warrant such a switch and switch box.

16. ADDITIONAL REGULATIONS. In

- **16.** ADDITIONAL REGULATIONS. In addition to the regulations of this section, the commissioner may:
- a. Require the blast to be covered with approved mats;
- b. Determine the kind and amount of explosive that can be used; and
- c. Establish such additional rules and regulations as may be deemed necessary to protect life and property.
- Whenever in the judgment of the commissioner circumstances arise with reference to the use of dynamite and other explosives in construction or other types of work so that such use would constitute a hazard to either life or property of persons, the commissioner shall have the authority to establish and promulgate regulations with reference to the use of such dynamite or other explosives, and such regulations may relate to each of the following:
- a. The volume of dynamite or explosives which may be used by any person during a 24 hour period, or which may be stored at the location of its use in connection with such construction or other work.
- b. The storage restrictions for handling such dynamite or explosives, including but not limited to the type of shelter, fences, containers, location and such other safeguards or protection devices which shall render the stored dynamite or explosives less hazardous.
- c. The hours during which such dynamite or explosives may be transported from a place to the place where such dynamite or explosive is used.

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- d. The experience and qualifications which shall be required by a person or persons who shall have immediate control, custody and use of the dynamite or other explosives.
- e. Such other and further regulations as in the judgment of the commissioner shall be most appropriate and effective in order to preserve and protect the life and property of persons.
- f. The commissioner, ascertaining that dynamite or other explosives may either be used or stored in such volume as to constitute a hazard to the life or property of persons, shall cause to be served upon such person or persons having charge of the construction or other worka notice setting forth the safeguards which must be maintained in order to use the dynamite or other explosives. The notice shall also specify the method of adherence to the regulations promulgated by the commissioner on the part of the person or persons undertaking the construction or other workin which dynamite or other explosives are being used.
- g. Any person who shall violate any of the provisions of this section shall be subject to penalties as provided in s. 200-19.

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## LEGISLATIVE HISTORY CHAPTER 207

## Abbreviations:

am = amended ra = renumbered and amended rn = renumbered rc = created rc = repealed and recreated rp = repealed

Section	Action	<u>File</u>	<u>Passed</u>	<u>Effective</u>
ch. 207 207-01 207-3 207-3-1-f 207-3-2-b 207-3-2-d 207-3-3 207-3-4 207-3-5-b 207-3-7 207-3-8-a 207-3-8-d 207-3-9-a 207-3-13-h-0 207-3-13-h (note) 207-3-15-a	cr am rn from 236-33 am am cr am	891008 961523 891008 961523 980963 912164 980963 980963 980963 980963 980963 980963 980963 980963 980963 980963 980963 980963	10/10/89 2/11/97 10/10/89 2/11/97 12/18/98 7/7/92 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98 12/18/98	10/28/89 2/28/97 10/28/89 2/28/97 1/1/99 7/24/92 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 1/1/99 2/28/97
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